

**STATEMENT OF WORK
REHABILITATE WELL INSIDE BUILDING 3226
EIELSON AFB ALASKA**

1.0 SCOPE OF WORK: The contractor shall furnish all labor, supervision, materials, equipment, tools, permits, approvals, and fees necessary to rehabilitate one drinking water production well. As used in this performance work statement, rehabilitation includes the following:

- Removing, testing, inspecting, reconditioning, and reinstalling the electric motor—US Electric Motor, 60 HP, 230/460, 3 ph, 71.4/68 amp, Motor ID B07 97073729-002R-1, 1785 RPM, Frame 364 TP.
- Removing and reconditioning the pump assembly, low water sensor, sanitary seal, line shaft, column pipes and couplings, and reinstalling the line shaft turbine pump Peerless Model 14MC, 1500 gpm, 115 feet TDH, Serial Number 207119.
- Mechanical cleaning of the well casing and screens. Replacing the filter pack (10-20).
- Surging and pumping well to remove debris, scale, and sediment
- Video taping the well before and after the rehabilitation work to inspect the casing and screen
- Documenting well production information (specific yield, capacity, static water level, pumping level, and drawdown) during redevelopment pumping
- Assuring proper installation of water level sensor through approved sanitary seal
- Reassembling the motor, pump, and piping, and test flowing the well

2.0 BACKGROUND: The following describes the drinking water production well covered under by this performance work statement.

2.1 WELL E

2.1.1 All depth measurements use top of casing as 0 datum.

2.1.2 Information provided based on best available records and work performed on a similar well.

Date Constructed	Work started 08 Jul 1998, completed 30 Aug 1998.
Well Type	drilled, cased and screened
Well Depth	146 feet
Well Diameter (casing)	18 inch casing; cased down to 90 feet
Well Diameter (boring)	24"
Pump Depth	42 feet
Static Water Level	21 feet
Drawdown	13.1 feet
Well Pumping Rate	When installed it had an average discharge rate of 1881 gpm. Now it is 750 gpm.
Top of Casing	0 feet
Steel Casing	18 inch steel casing
Screen (Bronze)	Screen is a stainless steel wire wrap and has a 16 ¼ in. outside diameter.
Surface Casing	24"
Production Casing	18"

Line Shaft	Lower Bearing: 7314-BEP; Upper: 6213-J/C3
Date of Last Redevelopment	30 August 2001

2.2 GENERAL INFORMATION: Each building provides lifting access to the electric motors, pump base, pipe column, and line shaft through an opening in the roof. Each building has 110-volt electric service and access to a fire hydrant. Well E sits inside Building 3226, the contractor may discharge well development water in the water channel adjacent to the well house. Discharge will be provided with screening and sediment removal with the use of development tank or sediment pond with sufficient capacity to allow the majority of sediments to be removed if feasible.

3.0 PERFORMANCE REQUIREMENTS:

3.1 The contractor must complete all work and return both wells to service before 15 July 2009. The contractor shall take steps to minimize the down time for the wells.

3.2 The contractor will perform all work according to generally accepted industry practices including the proper disinfection of all materials and tools placed in the well. As used in this performance work statement "generally accepted industry practices" includes those practices outlined by recognized national organization like the National Ground Water Association or the American Water Works Association. For example, American Water Works Association standards A100 Water Wells and C 654 Disinfection of Wells and manual of practice AWWA M21 Groundwater. The American Water Works Association sells its publications through its bookstore--AWWA, 6666 West Quincy Avenue, Denver, CO 80235, (303) 794-7711.

3.3 The contractor will provide the appropriate backflow prevention device for any connections they make to fire hydrants.

3.4 Submittals will include the following:

1. Work Clearance Request (AF Form 103)
2. Sedimentation Control Plan for development discharge
3. Tool Disinfection Certification
4. Letter Report of Motor Inspection and Reconditioning Requirements
5. Letter Report of Pump Inspection and Reconditioning Requirements
6. Catalogue cuts for Steel Column Pipe
7. Catalogue cuts for Low Level Sensor and Cable
8. Catalogue cuts for upper, lower and intermediate shaft bearings and stabilizers
9. Catalogue cuts for gravel packs
10. DVD Log of Well Inspection
11. Final Well Testing Log
12. Letter of Warranty for all parts and labor

4.0 WORK HOURS: The contractor may schedule their work hours as appropriate to completing the work and minimizing the wells' down time.

5.0 DELIVERABLES: The contractor will provide a written report detailing their work efforts and well data (e.g., specific yield, capacity, static water level, pumping level, and drawdown), and a copy of all DVD video inspections in for the well and a Letter of Warranty for all parts and labor.